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Virginia Wildlife

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NOVEMBER

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COVER: One walks up cautiously behind a pointing dog on a brisk, colorful November day, and suddenly a covey of bobwhites explodes and scatters on whirring wings, and "the season" is really here again, and there's nothing quite like it in all the world. Our artist: John W. Taylor, Edgewater, Maryland.

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EDITORIAL

Why the Hruska Bill?

WHY does the Virginia Commission of Game and Inland Fisheries prefer Senator Hruska's bill (S. 1853) to Senator Dodd's (S. 1, as amended) as the better approach to firearms control legislation?

With enactment of S. 1, Congress would "find and declare" that, all statistical evidence to the contrary notwithstanding, "the ease with which any person can acquire firearms is a significant factor in the prevalence of lawlessness and violent crime in the United States"; and furthermore, that there exists "a causal relationship between the easy availability of firearms and juvenile and youthful criminal behavior." The philosophy would then prevail officially that, by their very existence, firearms motivate criminals and corrupt youth.

The Dodd bill would abolish interstate shipment of firearms, except between licensed manufacturers and dealers, and would leave to the discretion of the Secretary of the Treasury the decision as to who shall and who shall not be licensed to manufacture or deal in firearms. It would also delegate to the Secretary broad power to "prescribe such rules and regulations as *he* deems reasonably necessary to carry out the provisions of" the legislation.

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FROM

LETTERS

Spring Gobbler Hunting

I am a turkey hunter, first and foremost. I like to hunt turkeys just as bird hunters like to hunt quail and usually doves. There are others who would think of hunting nothing but deer, while others are interested in rabbits or squirrels.

At the present time we have only a two-weeks season to hunt turkeys in the fall, as do most of the other counties east of the Blue Ridge that have an open season at all. For the past several years our Game Commission has experimented with this spring season and, finding it successful and not harmful to the turkey population, has offered us this spring season. For some reason that I can't understand the Boards of Supervisors in individual counties have the right to deprive residents of this right to hunt.

I have found that these people that oppose this spring season are not primarily turkey hunters and some of them do not hunt at all. I firmly believe if these people knew anything about this type of hunting and had the skill that it takes to bag one of these birds occasionally, they would not oppose it.

As of now the turkey hunter has less time to hunt his favorite game than any other type of hunter. When combining the dove and quail seasons, the bird hunter has between 4 and 5 months in which to hunt. In most counties east of the Blue Ridge the deer season runs approximately seven weeks. The small game hunter has over two months in which to hunt. If we were allowed to hunt the two weeks during the spring, we would still have only 4 weeks to hunt. I think you will agree that when this season is taken away from us, we are being treated very unfairly.

What can be done about this situation? Why can't we be assured of this season each year, as we are the fall seasons, uninterrupted by local governing bodies?

Southside

The Commission must give heed to resolutions of governing bodies of political subdivisions of the State recommending reductions in proposed hunting seasons. Boards of Supervisors are closer to the people of their respective counties than are other officials, and should be more responsive to their opinions and desires. The members of Boards of Supervisors have to stand for election by the people of their respective counties, while Game Commission members do not.

The Game Commission is not bound under any circumstances to provide more liberal seasons than its knowledge, judgment and conscience dictate. Its ability to protect the State's wildlife resources from unwise exploitation is not compromised. Its ability to permit maximum opportunity to harvest available wildlife surpluses, however, may be subject to some local restraint.

The Game Commission can provide ample evidence that spring gobbler hunting is not detrimental to the resource. It cannot convince Supervisors that it knows more than they do about what their constituents want. —Ed.

A Bird in the Hand

By KIT SHAFFER
Game Management Field Coordinator

THE game manager noted carefully the focal point of the lazily circling turkey buzzards. He had noticed them earlier in the morning and now decided to investigate the reason for the presence of the vultures. It wasn't long before he located their food supply. It wasn't a very pretty sight; not much remained of what had been a large ten-point buck.

About a week earlier the game manager had heard a pack of hounds running a deer, had noted the three quick shots, and had even checked out the fellow who had fired his automatic. The excited hunter had described a magnificent buck, but emphasized that he had missed his shots. He hadn't bothered to search down in the woods. He had heard another pack of dogs down the ridge, and now he was in a big hurry to get home to attend an afternoon meeting. Actually his deer had dropped in a gully less than 100 yards from where it had been shot!

This outdoor drama is not uncommon; it reoccurs hundreds of times each hunting season. The loss is not confined to deer alone; all species of hunted game are subject to this insidious depletion of wildlife populations.

All losses from shooting which are never recovered have been lumped into a category called "crippling losses" by professional wildlifers. Unfortunately, these losses have usually been taken for granted, as an inevitable part of hunting. Estimates of the approximate losses of wildlife to crippling varies with the individual making the guesses, and undoubtedly differs with the species being hunted. It is generally conceded that crippling losses to waterfowl are relatively high. Recent studies in Virginia to evaluate the effects of managed dove fields indicate that crippling and non-recovered doves contribute significantly to total losses in overall populations.

Most observations and guesstimates of crippling losses range from ten to thirty percent of the total recorded kill. It is virtually impossible to collect accurate data on these losses. There are approximately 400,000 hunters in the state of Virginia alone searching for and shooting at all huntable species of wildlife with a great variety of weapons and ammunition. Hunters differ widely in their hunting, shooting and retrieving abilities. It has been observed that some sportsmen insist that they hit everything they shoot at while, conversely, other hunters are negative about their shooting abilities and often unconsciously cripple game. It is apparent also that some species of wildlife are often capable of carrying away a great deal of shot without evidence of having been hit.

Crippling losses are heart breaking to many sportsmen. How often have we heard a frustrated hunter say after searching unsuccessfully for a downed bird or animal, "I wish now I hadn't shot." These losses deprive the hunter of the thrill of success and his family of a delicious wildlife dinner. Crippling helps to deplete the fields and forests of huntable wildlife.

Would you believe that a large percentage of crippling losses can be prevented or eliminated? All that is needed is a conscientious effort on the part of *every* sportsman to

(Continued on page 20)

Commission photo by Kesteloo

DO YOU SHOOT LIKE

MR. AVERAGE DUCK HUNTER?

By C. P. GILCHRIST
Supervising Game Biologist

WOULD you believe that it took three, supposedly seasoned, duck hunters a total of 135 shots to kill nine ducks? Well, it did.

One day at the beginning of last season a friend and I were ducking without much success. As we sat there waiting and hoping for some not too sharp-eyed ducks to decoy to us, we noticed that the blind across from us was having some excellent shooting. The wind was right for trading birds to cut past their point blind, and there was a constant banging all morning from their direction. We finally decided that either they were the world's worst shots or were killing all of the birds in this part of the state.

As all duck hunters know, when the ducks aren't flying by your blind you discuss everything in the world to pass the time. So, with all of the shooting that our neighboring hunters were doing, naturally our conversation turned toward what kind of success they were having. We decided that we would stop hunting when they did, and check and see what they had bagged when they arrived at the landing.

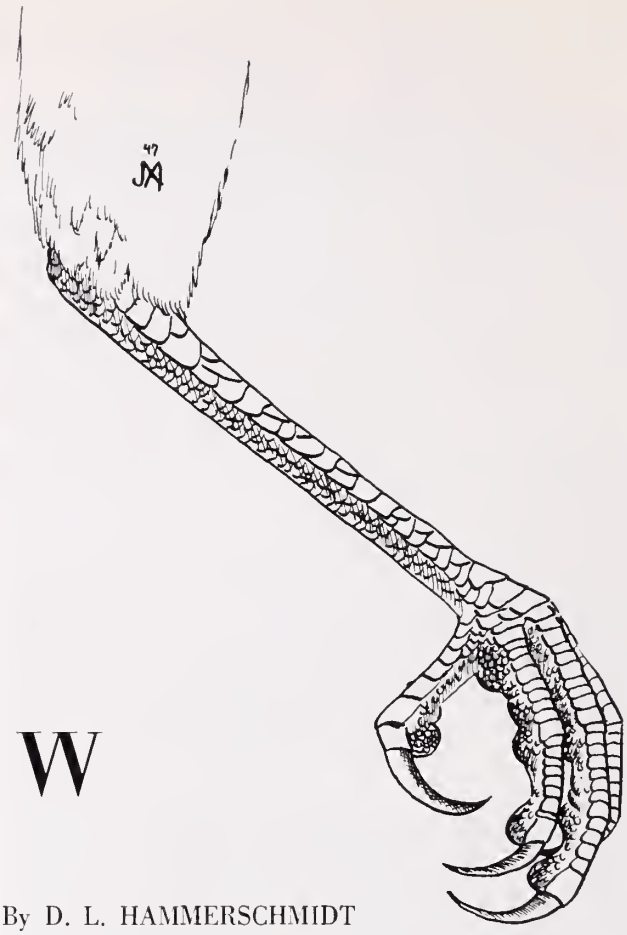
After lunch shooting slowed down at our neighbors' blind, and at about 2:30 they started taking up their decoys. We rushed around and took up ours and headed full speed for the landing. We arrived before our quarry, and when they reached the landing we were unloading our boat. We gave them a hand with their equipment and discussed the day's hunt. There were three in this party that had killed six ducks, said they hit many more, and I am sure had shot between two and three boxes of shells.

On the long drive home our discussion continued about these three hunters in particular and duck hunters in general. I had wanted for a long time to pick up information about the shooting habits and skills of our Virginia duck hunters but had never taken the time and effort to do it.

(Continued on page 19)

Wisconsin Conservation Dept. photo

Commission photo by Kesteloo



BEAK AND CLAW

By D. L. HAMMERSCHMIDT
Falls Church

ABOUT 150 million years ago, in the Jurassic period, strange creatures roamed the earth. One of these strange ones had feathers, wings and claws like a bird, but a head with toothed jaws like a lizard. It was about the size of a crow.

This was *Archaeopteryx* (ancient wing), the oldest known bird-like creature. Over the millions of years his descendants changed, some disappearing, some taking the steps in evolution which would enable them to survive. Many of the present orders of birds had appeared 20 million years ago. A modern bird watcher transported back to that time would be madly filling in his check list as he recognized the evident relatives of today's birds. So survival seems to be no problem for these creatures.

Yet how do they manage with these seemingly inadequate tools—a beak, two clawed feet, and with an added complication, legs jointed in such a way that most of them cannot raise food to beak (the parrot can), but must bring beak to food?

The birds that eat fruit and berries have no problem of eating, only of finding their food. And the hawk with its strong talons and powerful beak is perfectly adapted to catch, hold and rend the snakes, frogs, mice and other mammals which are its favorite food. But other birds have other tastes—and problems.

Specialized beaks and claws, adaptability, and in some cases pure ingenuity, seem to be necessary in bird survival. Birds open hard-shelled seeds, get the kernels from round nuts, pry into hard-shelled clams and oysters which are live and fighting back, get the seeds from tough evergreen cones, have varied methods of getting insects, and also use autos, rocks, thorns, barbs and crevices as aids to eating. The methods are as interesting as they are varied.

If you watch the birds which come to a feeder you have already noted some differences in feeding habits, tastes and skills. Some birds are ground feeders, scratching around on the ground for the small seeds which are knocked from the feeder or scattered there, and perhaps also looking for insects.

Two of the ground feeders have a most distinctive way of searching for insects and seeds. One is a sparrow with a heavily streaked and spotted breast, one of the few birds which can scratch with both feet at once. It leaps into the air, kicks backward and lands, a quick sharp rhythm, telegraphing its presence, a rapid dit-dit-dah. Leaves and dirt fly under this little bird's feet as it scratches for its meal. And if there is snow on the ground this sparrow simply excavates through snow to the ground, then begins looking for seeds and insects under the dead leaves which it has uncovered and overturned.

That industrious little scratcher is the fox sparrow. The other bird which can also jump, kick and land is such a noisy character that it can be mistaken for an unskilled woodsman walking carelessly through the underbrush. Finally you locate the source of the rustling—a towhee, with a flash of chestnut red beneath its wings, intently turning over the leaves for its meal of insects and seeds. You may see it near the base of the feeder, for it feeds only on the ground, or as far up on a bush or tree trunk as it can reach or jump.

But cardinals, chickadees, titmice and the woodpeckers will feed from the higher feeder or, except for the cardinal, from a suet bag hung on a tree. And again you will see differences.

The cardinal hunches on the edge of the feeder and eats steadily. His beak is broad and strong, and he cracks the tough sunflower seeds easily, ejecting the broken shell and

swallowing the kernel.

But the smaller titmice and chickadees have much smaller bills, so small that they seem sometimes to have difficulty even in securing a sunflower seed to fly off with it.

These birds use a combination of claws and bill to get at the seed kernel. They carry the seed to a nearby bush or tree, light on a small branch, hold the seed on the branch between their claws, and with hard hammering pecks break open the shell and extract bits of the kernel. Their aim seems to be unerring: so far I have not heard of one which hammered his toe instead of the shell.

The nuthatch has to find another way of breaking into the sunflower seeds. His beak also is too small to chomp open the shell, and he appears to prefer his customary head-down position on a tree trunk for eating. So he puts the seed where he usually finds his food—he flies to a tree nearby, wedges the seed into a crevice, and there hammers it open with his beak.

The beaks and claws of many birds are well adapted to the kind of food they eat. The long bill of the hummingbird is one example of the beak made for the job. The crossbill is a bird which can get at the seeds tucked behind the tough scales of the pine cones. His curved and crossing bill is excellent for wrenching off the scales so that he can get at the seeds hidden behind them.

But some birds need other aids, or, like the nuthatch, ingenuity. The shrike is a relentless hunter—pursuing and killing other birds, frogs and mice as well as insects. But it has weak talons and cannot hold down the larger prey. So the shrike uses an aid—he impales his meal on a thorn or barb, or wedges it in a crotch of a branch, and then eats it or leaves it in storage.

Some birds have built-in aids to their beaks and claws. The woodpeckers, when they have located buried insects or larvae under the bark of a tree, start excavating a hole with their pounding bills. When the hole is large enough they remove the grub with specially adapted tongues. The tongue has a stretchable portion, like a bit of elastic, back in the woodpecker's head, and is equipped with backward pointing barbs for hooking the insect or larva to remove it from the hole. Some woodpeckers have sticky tongues also—a decided advantage in removing things from holes.

Flickers, too, have sticky tongues, a great help in obtaining part of their favorite delicacy—ants. They run along the ground, find an ants' nest, extend their tongues into the hill, and pull them back loaded with that tasty snack—ants and eggs.

If you have spent any time at a beach or near the water, you know that the fish-loving birds have different ways of catching fish. Some, like the kingfishers, cormorants, and many of the ducks, dive for their dinners. Some of the birds are waders, following the edges of stream or ocean, like the herons, dipping their long beaks to spear or catch fish, frogs, tadpoles or crabs.

Specialized beaks of both land and sea birds are wildly varied, from the pouched beak of the pelican, the hard, brightly colored broad beaks of the puffins, apparently used for cracking the hard-shelled crustaceans, the wide mouths of some of the insect catchers, like the nighthawks and whip-poor-wills, to the tiny pointed beaks of some of our smallest birds. One of the most curious beaks is that of the skimmer, whose lower beak is about a third longer than the upper. You might think that unfortunate bird is marked for extinction. To pick up something on land it has to tip its head over sideways. But the beak is well adapted for the skimmer's choice—it simply flies along close to the surface of shallow water, beak open and the lower part cutting through the water, scooping up whatever fish and crustaceans are near the surface. The only trouble with this arrangement is that the skimmer occasionally runs into the bottom and gets its head jerked around, but, undeterred, it goes on fishing the shallows.

Another lover of fish food, the oyster-catcher, could just as well be caught by the oyster as vice versa. But it has learned to drive its wedge-shaped bill quickly into the oyster, paralyzing it before the oyster can snap shut on the oyster-catcher. The gull, however, without such a beak, has to find another way to open the clam which it relishes. It has found two ways of solving its problem. One is to carry the clam high and drop it on the rocks below, again and again until the clam breaks open. The other way is to let someone else do the work. Some modern gulls have learned to fly up with the clam, drop it on a highway, and wait for a passing auto to crack it open.

As for that round nut—the woodpecker which has found it has a problem. He is unable either to crack it with his bill alone, or to hold it with his claws to hammer it open. So he chisels out a vise in a tree by pecking a V-shaped hole, pushes the nut into his vise, and proceeds to crack it. Easy when you know how.

Thus beak and claw, and a few tricks when necessary, plus a varied diet, for few birds can or will depend on one item alone, have proved adequate for survival. *Archaeopteryx's* descendants are doing all right.

Commission photos by Kesteloo

The crow's beak (left) is not adapted for a specialized diet, and reflects his omnivorous taste in foods. The eagle's claws are for grasping prey, while other birds' feet are best fit for walking, swimming, or just perching. The merganser has an admirable tool for seizing tiny fish and other slippery aquatic animals.

DEER OPENER IS DEAR TO HUNTERS

By OZZIE WORLEY
Roanoke

THE first day of the deer season is no time for the faint of heart to venture out in the woods.

Driving along a highway in deer country and gawking at the brightly clad hunters is one thing. Actually being in the woods at the crack of dawn is another. You'll see and hear things that make a lasting impression.

Take the last opener. November 21. I was in Craig County in western Virginia's mountain country.

Bang! Bang! Bang! Rifles and shotguns fired one after another—and sometimes simultaneously. It was enough to make a timid soul want to dig a hole and pull the ground over him.

Nevertheless, there are not as many accidental shootings as the uninitiated might think, despite the throngs in the woods.

There's something about opening day—I guess it's the expectancy—that makes hunters go back again and again. And this past opener was no exception.

It was cold in the Craig mountains, forcing numbers of hunters to retreat periodically to their automobile heaters.

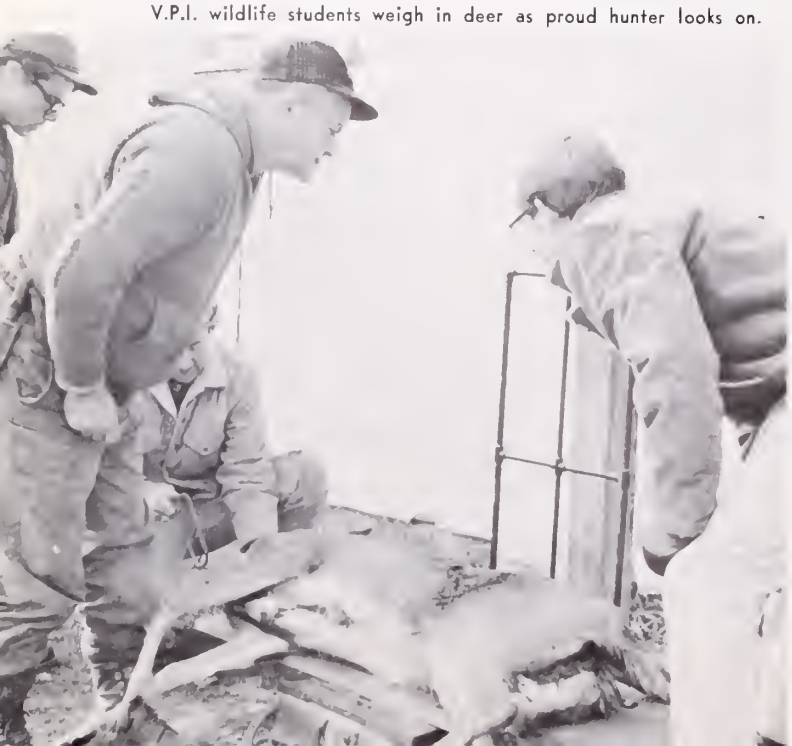
Along the John's Creek road, near the Old Craig Healing Springs, I spotted three youths trudging along the side of the highway. I stopped for a chat, since I saw that they had a small doe lashed to a pole. Two of them had the ends of the pole on their shoulders. The third carried their rifles.

"We've got a long way to walk to our car," said one of them, explaining the pole. Larry Cecil of Roanoke, who had one end, had shot the doe. His younger brother, Allen, had the other end of the pole. Their friend, Frank DiDomenico, also of Roanoke, carried the guns.

On up the road, near the settlement of Maggie, there was a huddle of hunters around a set of scales outside the A. P. Huffman general store. The men were watching deer being checked in by a team of students from Virginia Polytechnic Institute's Cooperative Wildlife Unit.

The Techmen were determining the weight, age and general well-being of the deer. The Huffman store was a big game checking station. Similar teams from VPI checked deer at other such stations throughout western Virginia on opening day.

V.P.I. wildlife students weigh in deer as proud hunter looks on.



Cary Creed goes to work with hacksaw to claim antlers from deer both he and Steve Mullins shot at the same instant.

Suddenly there was a hum of excitement at the store. Word came that down the road a few miles a hunter had bagged a 24-point buck. If the information proved correct, this was an exceptional deer since the winner of the previous year's big game trophy contest was only a 21-pointer.

Initially, it was reported that the buck would be checked in at Huffman's in a matter of minutes. Time dragged on, and still no deer. One of the waiting hunters suggested that perhaps it was so big they had to take a tractor into the woods to bring it out.

In about 30 minutes, with the buck still not in sight, I decided to start looking for it. I headed down the John's Creek road, keeping an eye peeled for any sign of it.

Luck was with me. After driving three or four miles, I spotted what appeared to be a big deer hanging in a shed in the yard of a home. I slammed on the brakes and went to investigate.

It was the prize buck, all right, and it *did* have 24 points. It had been bagged by a preacher.

The lucky hunter, Charles Delaney, pastor of Harrison Church of Christ in Johnson City, Tennessee, was taking a lot of ribbing when I arrived on the scene.

"You must've paid the preacher yesterday (a Sunday)," piped up one of the hunters admiring the buck.

Mr. Delaney related that he had come to the John's Creek area at the invitation of Jack Harris, who formerly was minister of the Church of Christ in that section.

(Continued on page 17)

Safety: A Hunter's Responsibility

By JOHN A. BATLEY, JR.
Alexandria

HUNTING as a sport and recreation is not unduly hazardous; nor is it completely safe. This same appraisal of individual exposure to potential danger applies also to most activities to which we are accustomed. Downhill skiing, boating, driving the family car to the shopping center, and taking a tub bath are not entirely free from hazard and accident.

Disabling injuries and fatalities, regardless of cause and origin, are tragic reminders of some individual's "*error*." Accidents when hunting are not exceptions to this rule. The victim, to be sure, is not always at fault, but there can be little doubt that someone blundered.

Progress in this twentieth century has not produced a formula or computer system which will predict *who* may become a casualty from the firing of a weapon while hunting. There have been developed, however, comprehensive records of those conditions, actions and circumstances causing nearly all hunting accidents of the past. These records provide the basis for statistical analysis. The analyses have established, without doubt, that the *same* cause-factors responsible for the majority of hunting accidents last year and the years before that, will again be major culprits during the current hunting season. It can be stated, with reasonable reliability, that hunting accidents which occur in the future will not originate from new or unusual causes; most, if not all, will *fit* into the already existing pattern.

Each individual hunter must accept his share of responsibility for making hunting a sport and recreation having an accident frequency rate of zero. It is his own independent effort that will make such a record possible. It becomes his duty to contribute since hunters themselves are responsible, directly or indirectly, for the majority of hunting accidents. The weapon, be it shotgun, rifle, handgun or bow, merely responds to the control it receives—good or bad.

The purchase of a hunting license conveys a *privilege* to hunt. It is not a license to hunt when and where personal fancy dictates, but in strict accordance with national, state and local laws and regulations. It is reasonable and appropriate to acknowledge that this privilege also carries with it a moral responsibility to enjoy and use it wisely. Responsibility for wise usage means that each licensed hunter know and put into practice the accepted rules for safe hunting and proper personal behavior and ethics. To follow these rules, as a matter of habit, reduces the chance for self-injury and accidental exposure to hazards in the vicinity.

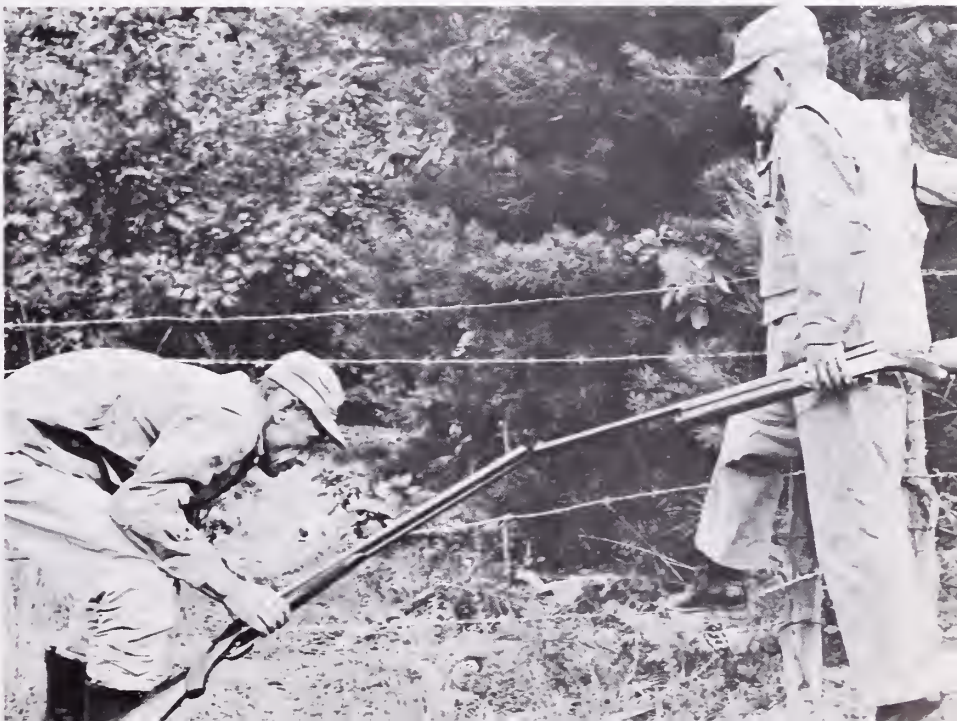
No hunter is so young or so old that he can be excused from knowing and respecting the fundamental rules and principles of safe actions and good conduct. It is well to remember that accidental injury and fatality have no preference for the age of the victim; they have exacted their toll from both extremes of the age scale as well as from the middle grouping.

There can be little doubt that each hunter, regardless of age, has something more to learn about being a safe hunter. The quest for this knowledge, by tyro and *expert* hunter alike, should never cease. A large part of the education can be gained by knowing of others' mistakes. To be unmindful of these known errors of omission and commission invites disaster.

In addition, each individual hunter should know those basic procedures which, if followed, will give reasonable assurance of hunting and shooting safety. To memorize these procedures, as one would memorize the various stanzas of a poem, is not enough. It is necessary that the *meaning* and broad implementation of each be clearly understood.

To understand *what* improper personal actions and carelessness provided both cause and effect for many of the past accidents, is to be fortified with a knowledge of what *not to do* in the future. The "generally" accepted rules for safe hunting have anticipated all these actions, and others, and attempt to warn hunters of their consequences.

(Continued on page 22)



If this were not a posed photograph in which the wrong way to cross a fence is being purposely illustrated, one would have to say that neither of these hunters knows how to cross a fence and that each is a menace to the other and to anyone else that hunts with him.

Trials and Tribulations of a Setter Puppy

As Told To
ARTHUR DUGDALE
Ashland

MARSTER says my name is Hanover's Bomber Dandy, but he calls me "Danny Boy."

I was born in Sardis, Mississippi, and my Marster there had a lot of us; said he has a kennel of fine English Setters, but said I am a Llewellin Setter. He said I was very elitely bred, whatever that means. My daddy is Bomber Dan; he is a "big shot" in the deep South, and mama is Break of Dawn.

My first Marster said he liked me, but he gave me bad tasting medicine, and let a doctor stick needles in me! Anyway, one day Mr. Askew put me and one of my brothers in a crate he made, and drove a long way in his "car-car," a pickup truck. Soon we were in Memphis, Tennessee.

Big airplanes were all around. A man loaded us on a plane. He read the tag on our crate, then told another man we went to Washington, D. C., then to Ashland, Virginia, on a train! It might have been fun, if I wasn't so scared. Brother was a cry baby; he just wailed when we took off. Guess he knew he was never going to see mama again! I got kind of sniffly too, but Marster said I was a big puppy now, and mustn't cry like a little baby. He said I was eight weeks old, so that must be a long time.

After I stopped trembling with excitement I found I was hungry. Marster had put a lot of food and water in cans in our crate. I ate a little, but was too excited to eat much.

A funny looking gray haired man met us at the station in Ashland. As we passed him on the train, he saw us and yelled, "There are my babies!" I thought, "Oh my—is *that* my new Marster? Horrors!"

Marster said that when we arrived we were beautiful, but frightened, lonely and trembling. When he took me out of the crate and held me up, his heart sank, he said, for we both had a serious fault, and we had come eleven hundred miles! He said we had such a deep Southern accent, he couldn't understand a thing we said! Marster said, "Son, how did you like the trip up here on the big old airplane?" I said, "It was rairt smart nairce." Man, it was two months before we could understand what each other said. But we sure do speak the same language now!

Marster loaded us into another pickup truck, and said, "Pups, let's go home and see where you are going to live." Our new home was a shady back yard, with three little houses, all facing Marster's house. My fright soon changed to curiosity, and I found more things to play with! Hop toads, pine cones, sticks and stones. We were fed twice a day, but Marster would put our bowls down, as we jumped up and down, put out his arm with fingers reaching for something, and say "whoa-whoa!" A keen little switch stung us if we disobeyed and went for the food too soon. After a minute or so he would say "high on!" Then we dived in. Why he played that game with us we didn't know then, but we sure do now! When we later found birds in the fields and edges of woods, and pointed, that "whoa" was easy to understand—it meant don't flush those birds!

We had to play by ourselves all day, but in late afternoon, Marster came home from work, got his whip and whistle, and our schooling period was held. We learned to retrieve quite easily; Marster said it was "born in us," whatever that meant. After retrieving and obedience lessons for ten minutes, we practiced "walking to heel," and stopping at the order "whoa." Soon we did this without the leash, and Marster praised and petted us for that. We learned that it paid to be good and obedient, for at "school" there were cookies nearby—rewards for good performances. Everything that Marster taught us, he made a game out of; said it was easy to learn that way.

We would go to the nearby woods to "find the birds!" At first that meant a grand run, chasing everything that moved. But soon each different smell we found meant a different thing. We even began trailing Marster by scent. Later he made a game of hiding from us, but we found him every time!

You know, the best smell of all, that made us stiffen and raise a front foot, came from those brown birds that loved to hide from us. Marster calls them quail. He lets us find them, point them, but he makes them fly. We must stand still while he shoots. Sometimes he actually kills a bird, but usually they just fly away, laughing! They fly to the meanest thickets in the woods, and hope we won't find them again.

When I was six months old, and found birds for Marster, after letting me point them a while as he petted me, he flushed them, and at first he let me chase them to my heart's content. I soon found I couldn't catch them. But Marster soon changed that, and clamped down, and chasing birds became a serious crime, with the penalty of a good whipping that I still remember. He made me stand still while they flew away; can you imagine that? But I always watch those birds, clear out of sight, and then go and find singles for Marster.

After the nights got cold and the leaves fell off the trees, Marster began carrying a gun when we went hunting. He killed three birds before it dawned on me what all of my "schooling" was about! I was to find the birds, point them for him to flush, stand still while they flew away, and Marster would shoot *at* them. Man, if he could only shoot that little 20 gauge gun straight! He would miss twice, then

(Continued on page 16)

OUR GENTLE MOUNTAINS

By FRANCES REEVES OWEN
Bedford

MAN is wonderful but nature's handiwork will always win out. All over our country are spots of natural wonder and beauty that leave the viewer breathless. Our state of Virginia is such a spot.

The trouble is—here it is at our fingertips and we don't take time to look!

In this frantic and hurried existence, that most of us experience nowadays, our nerves, eyes and ears are strained almost to the breaking point. But what a healing there is in our great outdoors!

If only each one of us would take a few minutes a day and in solitude let our nerves be calmed by breathing deeply of our pure air, our ears soothed by listening to the clear tones of nature, and let our eyes drink in and savor the stupendous beauty of our state.

Take Bedford County, for example, for what is more inspirational and breath-taking than our Peaks of Otter? These gentle mountains surrounding us seem almost human and weave themselves into our lives. But how often do we take a moment to really look at them or go up among them and feel their greatness?

They aren't gigantic, rugged towers rising awesome and majestic, nor are they softly rolling hills. Our peaks are strong and protective, seemingly aware of those they are watching over, pliable enough to respond to the peace or turbulence of nature, and they forecast every season. We have a deep feeling of companionship with them.

Maybe they seem human to us because they have entered into our daily lives through many generations. There's an affinity between us and we feel drawn to share the beauty and wonder that covers these hazy, blue peaks and valleys.

It would be hard for some people to understand how, in this southern climate, we would be drawn to these mountains in the cold, winter months. But we can't resist the incredible beauty of the enormous mounds of snowy rocks and trees. In a matter of fifteen minutes by car, we enter a winter scene as glorious as any Christmas card. We sleigh ride down natural slopes, ski and throw snowballs. Leaving, we silently thank the peaks for preparing this winter fun for us.

But this is only a part of our year's pleasure. For next is spring, with its pastel sweetness of pink and white dogwood, redbud and perfect blending of the different shades of green. The air is cool and clear on these mountain paths. The brooks are rushing with excitement. The wildflowers are blooming, proudly unafraid, for we aren't allowed to pick them. On Thunder Ridge you are breathless as you gaze on a sea of pink and white trillium.

Spring drifts into the warm days of summer. We pack our picnic baskets, drive up the winding road to the cleft between the peaks to the boulder-strewn stream. Picnic tables and fireplaces seem to grow out of the ground because they're formed out of the natural stone in their natural habitat. It is ten degrees cooler up here and we're alone with the Almighty and creatures of His earth. Here we're with memories of the past. There's not a soul in these parts who hasn't shared the glories of these mountains.

This spot is on the Blue Ridge Parkway and the camping area is always full. Travelers come from far and near to pitch their tents and stay for a night or a week.

Vivid color is the keynote of fall. Winter is white and teal blue. Spring shades are soft and light. Then we have the steady, deep green tones of summer. But fall, that's when our mountains are festive! They have their last fling before winter sets in with its icy quietness. The herds of elk thunder around in the trees and sometimes burst out across the Blue Ridge Parkway. Wild turkeys strut in their bronze and black plumage!

Thus our mountains, like an artist, paint the seasons for us. They're an intimate part of our lives, whether we're eight or nine miles away in our homes, or high in the midst of their rocks and trees. They renew us and give us strength.

COMMISSION-OWNED LAKES:

Hidden Valley Lake

By HARRY L. GILLAM
Information Officer

ANGLERS looking for something really different should try Hidden Valley Lake in Russell County north and west of Abingdon. The 61-acre lake is located on the Hidden Valley Wildlife Management Area and is the only real "Trout Lake" the Commission owns. Rainbow and brook trout are stocked as fry to take advantage of natural growth potential in the lake. Anglers must use artificial lures with barbless hooks and may only keep trout 10 or more inches in length.

The lake was acquired along with the Hidden Valley tract in 1964. The original dam was repaired and modified and standing timber was cut from the lake bottom. The waters are naturally acid, so lime is added frequently to sweeten them up and increase fish food production. The lake is nestled in high mountains at 3500 feet elevation. A boat launching ramp is provided for launching private boats.

Fishing is best in April and May and late in the fall during October and November. Brooks outnumber rainbows about 4 to 1 in the creel. On the average, anglers catch about 10 fish before they land one over 10 inches; but this provides a lot of "fun" fishing as well as yielding some tasty morsels for the pan. Keepers average about 10 to 12 inches with occasional catches ranging to 16 inches and over. As the fish population gets older, some even larger ones are sure to turn up. The average creel has been about 1 keeper trout per day; but this isn't bad when compared to an average creel of 2.6 fish per angler at Douthat Lake, which is stocked continuously throughout the season and where anglers are permitted to use bait. Fisherman density ranges from 10 to 15 on weekend days early in the season to 5 or less during hot summer months and back up to 10 or 15 for the late season fishing.

Commission photos by Kesteloo

Brook trout have shown better growth and survival in the lake than have rainbows, so stocking has gone almost exclusively to brooks. The lake is classed as a put-grow-and-take operation since small trout are stocked and allowed to grow to legal size on natural foods in the lake.

Hidden Valley Lake is a picturesque high mountain lake offering "fish for fun" trout fishing with the added provision of allowing anglers to keep trout over 10 inches. Only artificial lures with barbless hooks may be used. The lake is not managed to produce the high creel typical of put-and-take facilities but rather to provide a lot of high quality recreation throughout the fishing season.

VIRGINIA WILDLIFE ☆ ☆ ☆ ☆

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

COMMISSION TO PURCHASE JAMES RIVER TRACT. The Commission has approved the purchase of a 576 acre tract in Nelson County for development as a wildlife management area. The new area is located near the Commission's Wingina public boat ramp and includes over a mile of frontage on the James River in a section noted for its smallmouth fishing. Immediate plans call for development of the area for dove and small game hunting by the fall of 1968. The tract is largely open fields and pasture with a few wooded sections. It is located in an area considerably removed from other Commission owned lands. Developments on the new tract will be handled in conjunction with cooperative wildlife development work now being carried out by Commission personnel on the Cumberland and Buckingham-Appomattox State Forests.

VIRGINIA GAME DIRECTOR ELECTED BY INTERNATIONAL BODY. Chester F. Phelps, Executive Director of the Virginia Commission of Game and Inland Fisheries, was elected chairman of the Executive Committee of the International Association of Game, Fish and Conservation Commissioners at the Association's recent meeting in Toronto. He has been a member of the International Association's Executive Committee for the past two years.

Phelps has been with the Virginia Commission of Game and Inland Fisheries since 1939, and has served as its Executive Director since 1958. A year ago he was selected by the Virginia Wildlife Federation to receive the Governor's Award as State Conservationist of the Year.

2,438-ACRE PITTSYLVANIA WILDLIFE AREA APPROVED FOR PURCHASE. The Commission of Game and Inland Fisheries has been given authorization by Governor Mills E. Godwin, Jr., to purchase a 2,438-acre tract in Pittsylvania County for development as a Wildlife Management Area. Game Commission Chairman J. C. Aaron of Martinsville and a group of prominent Pittsylvania County citizens presented the plans for purchase to the Governor September 18. It is expected that purchase will be completed and the area readied for public use some time in the spring of 1968. The area is made up of some 13 separate but adjoining tracts.

This latest land addition will be administered by the Commission's game division and will be managed for hunters, fishermen, campers, field trial enthusiasts, hikers, horseback riders, naturalists and for those who simply enjoy being out-of-doors. About 40 percent of the land is open and in pasture or cultivation. The remaining 60 percent will be managed for timber as well as the production of wildlife. There are several small ponds and sites for additional impoundments. Pittsylvania County will receive 25 percent of the gross receipts resulting from all sales of timber and wood products. Game Biologist Hal Myers, Jr., has stated that the project lands will serve as an area on which to establish a nucleus deer herd. A further increase in these animals will depend upon the desires and cooperation of local residents.

The Pittsylvania tract is strategically located in that it will serve the non-landowner sportsmen in a section where public lands have heretofore been extremely limited. Such an area will also have the effect of reducing the use-pressure to which private lands have previously been subjected.

U. S. Fish & Wildlife Service photo by Van Huizen

MORE WATERFOWL FOR SOUTHSIDE

By JAMES C. PACK
Formerly *District Game Biologist*

IN the writings of many of our early explorers of America, one can find phrases like. "Thousands of acres of land as far as the eye could reach, seemed literally covered with waterfowl." Even in our grandfathers' time, people used terms like "great clouds of ducks," and "the sound made by the flushing of immense flocks of birds was like thunder."

No longer do we hear such descriptions of waterfowl abundance. The introduction of excavating machinery changed the picture for us. At one time in America, we had approximately 127 million acres of wetlands, but by 1950 we were able to reduce this acreage to 82 million. We are still draining and destroying our wetlands. This wholesale removal of waterfowl habitat alone is sufficient to explain why we do not have the multitude of waterfowl we had in the past. Our reduction of waterfowl habitat has alarmed many people, and has "sparked" our federal and state governments to purchase refuges to insure the preservation of waterfowl and the sport of hunting these birds.

The Elm Hill Management Area near Boydton, Virginia, in Mecklenburg County just below John H. Kerr Dam, was purchased by the Virginia Game Commission to serve primarily as a waterfowl refuge. Elm Hill serves the waterfowl hunter by attracting additional waterfowl to the area. The refuge delays further southward migration of waterfowl which improves local hunting, and it offers an unmolested resting site and provides supplementary food.

The management area, approximately 1000 acres, was purchased in 1965. It was formerly a cattle farm and the majority of the acreage is in open land. The topography is primarily gently rolling land typical of the farmland in the piedmont region, with approximately 200 acres of river bottom land that have now been developed to provide attractive winter habitat for ducks and geese.

The Elm Hill operation already has resulted in an extension of the state's waterfowl trapping and banding activities. Where the birds come from, where they go, and where they sometimes get shot, is important information for the waterfowl manager.

One hundred acres of this river bottom land has been planted in rye and corn. A dike has been constructed on the low ground, and a pump gathers water from Gaston Reservoir to flood 35 acres of land. The flooded area is planted each year during July with foxtail and Japanese millet, and the millet provides food for 4,000 ducks that use the area throughout the winter. Ducks become so concentrated in the pond that they cause a disturbance in the water which creates a slushing noise reminding one of rushing water running over a waterfall.

These ducks are able to consume over 75,000 pounds of millet seed per year. This may appear to be a huge quantity of food, but the daily food consumption necessary to maintain a duck is estimated to be about 10% of its body weight. Using an average weight of 2 pounds per duck, it would take 24,000 pounds of food to maintain 4,000 ducks for one month.

The species of waterfowl that are most frequent visitors to the pond are mallards, black ducks, baldpates (widgeons), teals, and pintails. Other dabbler species and several diving ducks are also seen using the pond.

Besides providing food for ducks, the pond serves another purpose: northern pike are reared in the impoundage and are released into Gaston Reservoir. In March after the waterfowl have left, the fish division places brood northern pike in the pond. The brood fish spawn, and the young pike devour the abundant small aquatic life. When the pond is drained in June, a special catch basin traps the brood fish and allows the fingerling pike to enter Gaston Reservoir. The brood fish are then returned to the hatchery to be used the next spring. This year an estimated 70,000 fingerlings were released into Gaston Reservoir. The continued stocking of the pike into the reservoir will add another species of game fish for our anglers.

In addition to the impoundage on the bottom land, another 30-acre pond and several small farm ponds are located on Elm Hill. These are frequently used by waterfowl. The 30-acre pond is seeded in millet, and it is flooded each year by runoff from a 2,000-acre watershed. This past year was the first time this pond was planted with millet. Usage went from less than 50 ducks in November, 1965, to over 2,000 waterfowl, including geese, using the pond in February, 1967.

Nat. Park Service photo by Rowe

Elm Hill's wintering waterfowl population is made up mostly of the dabbling ducks—mallard, black duck, pinteal and widgeon.

The large ponds, comprising approximately 70 acres, are the main attractions by which the Elm Hill Management Area is able to hold waterfowl throughout the winter. In the future, the Game Commission plans to add additional ponds to increase the carrying capacity or number of waterfowl that the area can support.

Besides providing food, these ponds concentrate ducks and geese in a small area enabling Commission personnel to perform trapping and banding operations. This past winter, an excess of 900 ducks were trapped, banded, and released on the area. When bands are returned, biologists will be able to trace migration routes, to gather population dynamics data, and to determine the rate of return of waterfowl to the area.

Since the primary purpose of Elm Hill is to serve as a refuge, hunting is necessarily restricted. Dove hunting is permitted during the early season when waterfowl have not yet arrived in the area, and bird dog field trials are permitted as these events do not frighten waterfowl from the area.

In the future, as additional waterfowl ponds are constructed on the area, as grasslands are kept mowed in alternate strips to preserve a variety of cover for upland game, and as permanent wildlife food plants such as autumn olive and bicolor lespedeza become productive, Elm Hill seems destined to take its place among the most important and productive Wildlife Management Areas in the state.

One of the several old ponds on the area, this thirty-acre impoundment was drained, renovated, planted to Japanese millet, and is shown here as it was being flooded last November to bring in the ducks and geese.

A bonus of Elm Hill management has been the successful use of the main waterfowl pond as a spawning and rearing area for northern pike. This netful of fingerlings were removed and taken to a regular fish culture station where they will be held as brood stock for future years.

Trials and Tribulations of a Setter Puppy

(Continued from page 10)

kill on the third shot; miss two more and kill another bird. Once when he missed with both barrels, in a wide open field, I was so mad I glared at him and shook my head. He got the message. Then I felt sorry for him.

When I was a teenager, between one and three years old, Marster and I had a few heart-to-heart and whip-to-hiney understandings. Once was when I killed two of Marster's frying-size chickens. Honest, I didn't know any better. Aren't they birds, and hadn't Marster been trying to kill those other birds? But that whip is the best persuader and reminder I know of! It will never happen again.

When I grew up to doghood I soon learned to look over a hunting field to see where the "birdy places" were. Then I would circle the field, keeping near the woods, to strike the scent of a covey that came out to feed. If I strike nothing, I work the field in large S's, circling until I find them or know they are not there. But lately those birds have gotten smart. They fly into the field, feed in a hurry and fly back to that honeysuckle patch deep in the woods. They like to live a while longer too, you know.

The latest hunting trick that I have learned is to hunt

Danny Boy pointing quail.

against the wind. If I strike bird scent in a field, and the breeze is at my back, I back off and go way around that covey, and come toward them from the opposite side. Then I can tell better how close they are to me. No, Marster never taught me that; I figured it out myself!

Marster has two other Setters, Belle and Bessie. Belle was born in Missouri, and she won't believe anything I say. I have to prove everything to her. But I like little Bessie. She is beautiful and has a famous grandfather, Champion Glenerest Doctor, who won the United States Open Shooting Dog Trials in 1957 and 1958. Pointers have won it every year since then. Bessie has a keener nose than I have, but I am bigger and can run faster than she can; and I think I am smarter than she is, so there!

But there is one thing I can't understand. When it is summertime, and the quail have paired off and gone to housekeeping, and raising a family, they come right into our other yard and whistle all day long. They seem to know they are safe, and Marster hears and sees them, but won't even get his gun. He's funny that way.

Let's Cook Venison

By MARJORIE LATHAM MASSELIN
Richmond

THE only time in my life when I got enough venison to satisfy my craving for it was during the years we lived in Germany. Game there is often served in restaurants, and various kinds seemed always to be available at the open-air farmer's market in downtown Munich. In a square, just behind the "Alte Peter," farmers from miles around gathered in stalls, shops, at pushcarts and even more temporary structures to sell . . . oh, EVERYTHING! If I had never cooked before, I would have been charmed into learning after my first visit to that wonderful place.

For the American cook, unless she has a huntsman in the family, venison and other game will be considerably harder to come by. Even then, its preparation may present a problem. Very few general cookbooks deal with it at any length, and most shrug the whole thing off by advising that it be treated like beef.

Those of us who have dined on properly prepared venison realize that there not only is no comparison, but that none is desirable. An inexperienced cook confronted with her first piece of venison may be defeated before she starts by this sort of "brush-off."

Since venison is essentially a lean meat, it is usually wise to lard, marinate or use tenderizer salt with the larger and tougher cuts. Well aged meat will naturally be more tender and tastier than venison that has been frozen immediately. It is always well to remember that ALL meat should be brought to room temperature before cooking it, and that the longer it is cooked, the tougher and drier it will become.

The choicest cut is the tenderloin or fillet which runs along the length of the rib. This should be cut into individual cross-sections at least an inch thick. It tapers at one end, and when cutting it into fillets, as the narrow end is reached, cut ALMOST through on the first cut; then an inch or so farther on cut all the way. Open out the two connected sections and lay them side by side to form one larger portion.

The best way to cook these is under an open flame or over charcoal. The fire must be *very* hot to seal in the juices. A minute or, at most, two minutes on each side is ample cooking time. This way they will be nut brown and glossy on the outer surfaces—blood rare, fork-tender and delicious inside.

My first dinner in Munich and my all-time favorite was built around this cut, so let's prepare this meal first:

Rehfilet with Steinpilz
Spatzle
Green Salad
Tyroler Burgundy
Fresh Fruit Camembert Cheese
Espresso

Steinpilz are darkish mushrooms with a distinctive "woodsy" flavor. They are available here, dried; but ordinary mushroom caps, sauteed in butter, make quite as nice a garnish.

Spatzle, a German egg noodle, should be freshly made close to serving time. The finished product looks for all the world like scrambled eggs! To make it you begin with a

kettle of salted water. Then make the dough while it comes to a boil.

SPATZLE
2½ cups self-rising flour
2 eggs
about ½ cup sparkling water

Blend and beat these ingredients with a wooden spoon until the dough "cleans" the sides of the bowl. It should be a little stiffer than chou paste. Flatten portions of the dough on a board and cut off small bits. Drop these into the boiling salted water and cook 2-3 minutes, until they rise to the top and look cooked. Blanch in cold water.

When ready to serve, melt plenty of butter in a heavy skillet, toss the spatzle into the butter until well coated and heated through.

For the salad use the more strongly flavored greens; venison has sufficient character of its own not to be overpowered by strong vegetables. Keep this point in mind when selecting accompaniments for a venison roast. Curly endive, escarole, watercress, young spinach leaves and garden lettuce are all good in any combination. Dress the salad with pure olive oil and wine vinegar in the classic proportions of 2 to 1. Add salt and freshly ground black pepper to taste.

A nice domestic wine to serve here is a California Pinot Noir. Be sure that you use a red wine vinegar on the salad if you serve a red table wine. With game, most people prefer one of the reds; personally, I think a good Rhine goes with anything. If you do, too, then use a white wine vinegar for the salad.

The saddle or loin makes an elegant roast—especially when turned on a spit over a very hot, well banked, "ashy" charcoal fire. This cut can be used for chops or steaks if you prefer it that way, and you will still have the rumps left to roast.

Ten to twelve minutes per pound over a very hot fire suits our taste for rareness in a roast. You must adjust the cooking time to your family's preference.

With a roast of venison, I like to serve small, whole potatoes either boiled and then bathed in parsley butter or cooked crisply brown in deep fat (Rissole potatoes). For the vegetables, brussels sprouts and chestnuts are nice. Boil separately in salted water, and combine to serve with butter. Puree of white or yellow turnip is good. My favorite is this: Melt 5 to 6 tablespoons of butter in a deep kettle, and into it slice the white parts of 2 or 3 leeks. Cook gently, being careful not to brown. When they are beginning to turn golden and transparent, lay 2 pounds of well washed spinach over them and dust on a scant ¼ teaspoon of nutmeg. Cover and simmer 5 to 7 minutes. The spinach should be tender-crisp and still green. Toss it to mix in the leeks and serve hot.

Currant jelly is traditional, but maybe you would like to try a picture-pretty mold of pomegranate jelly. The seeds from 4 to 5 pomegranates put through a food mill yield 2 full cups of juice. Strain once through linen for a very clear jelly. Bring the juice to a boil and stir in 2 tablespoonfuls of powdered commercial pectin until it is dissolved. Add 2½ cups sugar and boil 5 to 7 minutes. When the jelly "sheets" from the spoon, strain into molds or jelly glasses.

Most of the remaining parts of the venison you will want to use in stews and casseroles, such as "jugged venison" and "venison and kidney pie." The final remnants, simmered in cider until they are tender, and then ground, make a glorious mincemeat for holiday pies.

Deer Opener (Continued from page 8)

"I didn't get here until about 1 a.m.," said pastor Delaney. "I slept awhile and got up at 3 to start hunting."

He had walked to a ridge about one-half mile off the John's Creek road, where he hunted until he sighted the big buck at about 8 a.m. He brought it down with three shots from 50 to 75 yards off with his 35 Marlin rifle.

Somebody suggested that he should pose with a Bible beside the buck "because you're so lucky," and Mr. Delaney readily obliged.

"Sure do like this Virginia hunting," he said—and with good reason. It was the first deer he had ever bagged.

There was no question but that Mr. Delaney had nailed a fine specimen, and that it was all his. The same could not be said for two younger hunters, Steve Mullins of Christiansburg and Gary Creed of Bedford County, who also were hunting on John's Creek. They had to divvy up a buck.

Both youths spotted the 6-pointer at the same time. Mullins cut down on it with his 30-30 rifle at the split second that Creed fired with his 12-gauge shotgun.

Charles Delaney and 24-point buck he bagged in Craig County last opening day.

They settled ownership in a gentlemanly way. Mullins took the venison and Creed the antlers. And Creed lost no time in claiming his part of the buck. He produced a hacksaw and whacked off the antlers on the spot.

Joe B. Mullins, who is kin to Steve Mullins, checked in an 8-point buck at Huffman's Store at the same time that the two youths were dividing theirs.

"That deer those boys shot nearly ran over me," he said, shaking his head.

And, finally, one Craig resident who wasn't expecting venison got it, anyway.

Stuart Simling of New Castle accidentally struck a doe with his truck on the John's Creek road early on opening day.

This deer, apparently frightened by hunters, leaped onto the paved road, hit a wire fence at the edge and bounced into the path of Simling's truck. He couldn't avoid the collision.

A game warden was summoned. After learning the circumstances, he awarded the venison to Simling.

PREDICTIONS VARY BUT REGULATIONS ARE FIRM

Commission photo by Kesteloo

"GOOD to excellent hatching seasons across Canada's prime waterfowl production areas, setting the stage for another bright fall migration of ducks and geese down the four major flyways," was the report from Ducks Unlimited, Inc., firmly discounting published reports which have forecast disappointing fall duck flights because of a late nesting season and lack of brood water.

At about the same time the Bureau of Sport Fisheries and Wildlife announced that new waterfowl hunting regulations will be slightly more restrictive than they were last year and quoted Secretary of the Interior Stewart L. Udall, who explained that, "Despite a small spring increase in the duck breeding population, rapidly deteriorating nesting conditions due to drought on the northern prairies are expected to reduce fall flights."

Sportsmen will hope that Ducks Unlimited optimism will prove to be justified, meanwhile being governed by regulations dictated by the Secretary's more pessimistic predictions.

The Atlantic and Mississippi flyway seasons were each reduced by five days to provide more protection for the mallard population. Canvasbacks in all flyways have been given added safeguards through more conservative bag limits. Black ducks in the Atlantic flyway also receive additional protection this year, while the experimental late winter special black duck season in Maine, New Hampshire, and Massachusetts will continue on a reduced scale.

In Virginia two "bonus" scaup ducks, in addition to the regular daily limit of ducks, will be allowed *in the shaded area shown in the accompanying map*, but this liberalized bag limit in the designated area *will not apply to ringneck ducks, or ringbills*, as it did last year. The "bonus" scaup area includes the waters of Chesapeake Bay bounded by the first upstream bridges of its tributaries on the west, and by the Hampton Roads and Chesapeake Bay Bridge Tunnels and U. S. 60 on the south, and includes the tidal waters of Accomack and Northampton Counties. The roads making up the western boundary are: (1) Route #644 and #200 in Northumberland County; (2) Route #3 from Kilmarnock in Lancaster County to Middlesex County; (3) Route #3 in Middlesex and Mathews Counties; (4) Route #3 and #17 in Gloucester County to York County; (5) Route #17 in York County; and (6) Route #17 and Interstate 64 in Newport News and Hampton.

1967-68 MIGRATORY GAME BIRD SEASONS AND LIMITS

Species	Season Dates	Daily Bag Limit	Possession Limit
DUCKS*	Nov. 18 - Jan. 6	3* plus 2 scaup**	6† plus 4 scaup**
GEESE	Nov. 4§ - Jan. 12	2 Canada geese	4 Canada geese
COOT	Nov. 18 - Jan. 6	10	20
GALLINULES	Nov. 18 - Jan. 6	15	30
BRANT	Nov. 4 - Jan. 12	6	6
AMERICAN or REDBREASTED MERGANSERS	Nov. 18 - Jan. 6	5 combined	10 combined
SCOTERS, EIDERS and OLD SQUAWS	Nov. 18 - Jan. 6	7 combined	14 combined
CLAPPER RAILS and KING RAILS	Sept. 15 - Nov. 23	15 combined	30 combined
SORA, VIRGINIA and YELLOW RAILS	Sept. 15 - Nov. 23	15 combined	30 combined
DOVES	Sept. 16 - Nov. 4 Dec. 18 - Jan. 6	12	24
WOODCOCK	Nov. 20 - Jan. 23	5	10
JACKSNIPE	Nov. 20 - Jan. 8	8	16

*Not to include more than 2 wood ducks or 1 canvasback or 2 black ducks

**In special area only

†Not to include more than 4 wood ducks, 1 canvasback or 4 black ducks

§Goose shooting not permitted on BackAy waters and marshes until November 18

Mr. Average Duck Hunter (Continued from page 5)

As employees of the Game Commission, we often wonder just what the "average" waterfowl hunter is like in the field. We normally only see one side of him, and this most often is when he is not hunting! He appears to be, most of the time at least, a jovial type that enjoys discussing all phases of waterfowl life history from egg to pot. He usually goes into a great deal of detail about his various hunts on famous areas or on his favorite marsh or pothole. He very seldom seems to miss, and quite often doubles. He does not claim to be an expert on identification, but is sure he can tell a goose, a mallard, and a teal apart.

Telephoto camera shot catches hunter with a duck dead in the air, a relatively infrequent occurrence, both for the hunter and photographer.

The day when our neighboring hunters shot so many times and killed so few ducks was the catalyst that was needed to start a survey. We decided to do a little checking, just to see what the average hunter really is like in the field. We picked some areas where observations could be made during the remainder of the season, on hunters who would not realize that their every action was being recorded. Several different blinds were selected, and a total of forty-five duck hunting parties were observed, at pretty close range.

When we tabulated the data from our separate observation record cards at the end of the season we came up with some wild figures. "Mr. Average Duck Hunter" is not as good as he probably thinks he is, nor as he leads his friends to believe, and he *very seldom doubles!*

There were a total of 116 individual hunting trips to the blinds that were spied on. A total of 1196 waterfowl decoyed to or flew within range of them. A total of 202 birds were killed outright; 51 were crippled, and 26 of the 51 were lost, to bring to bag a total of 227 birds.

To bring the 227 birds to bag, 1263 shots were fired—an average of 5.6 shots per bird.

The average number of birds per flight was 4.7, and an average of 5.0 shots were fired at each flight. The term "crippled" refers to birds that fell, requiring that someone leave the blind and attempt to catch or finish killing them.

The 116 man-days of hunting totalled 923 hours, for an average hunt of 7.9 man-hours. The blinds averaged 5.6 flights per day (some had no flights of birds, some as high as 15 flights of birds), with an average kill of 5.0 birds per blind per day of hunting. This is an average of 1.96 birds per man day or 0.245 birds per hour of hunting.

The poorest shooting averages are as follows. Three hunters had six flocks, with a total of 21 birds. They fired 47 shots and killed one bird for a 2.1% average. Another group of three hunters had 15 flocks of 45 birds, fired 135 shots, killed 9 birds, crippled and lost 6 additional birds for a 6.6% average. Another group of three hunters had 12 flocks of 175 birds, fired 101 shots, killed 10 birds, crippled and lost 1 bird for a 9.9% average. The three best shooting blinds scored as follows: Best—six flights of 22 birds, 16 shots fired, 7 birds killed, for a 43.7% average. Next—six flights of 33 birds, 40 shots fired, 13 birds killed, 1 lost, for 32.5% average. Third—nine flights of 49 birds, 31 shots fired, 10 killed, 1 lost, for 32.2% average.

When it came to bird identification most hunters were *sadly* lacking. Even though we could not successfully quiz the hunters on what they thought the birds were when in flight, their lack of ability to identify many of the birds killed, especially the drabber female, became so painfully obvious as to make one wonder whether we can ever successfully regulate hunting on a species by species basis.

If you are wondering what the purpose or moral of this article is supposed to be, don't let it bother you. We just thought our readers might be interested in what kind of shot "Mr. Average Duck Hunter" really is, under random field conditions, and if there has to be a lesson maybe it is that all of us duck hunters should practice a little more shooting before we go ducking this year.

Mr. Duck Hunter is not always the hot shot he thinks he is. He fires an average of about 16 shells when he bags his three-duck limit, which he seldom does.

A Bird in the Hand (Continued from page 4)

practice self discipline, to spend some pre-hunting season time testing his weapons, to adopt an unselfish attitude which considers the hunted rather than the pride of the hunter, and finally, to accept the truth of the ancient adage that "It is better to have a bird in the hand than two in the bush."

We are convinced that if sportsmen's clubs and individual hunters would make a concentrated effort to reduce crippling losses they would reap huge dividends in the form of improved and more satisfying hunting experiences. We have analyzed the main causes of crippling losses, and have listed below specific ways by which sportsmen themselves can either eliminate or curtail them.

1. *Know your weapon.*

Never obtain a weapon and go hunting immediately, without ever testing or practicing with it. A hunter should select a gun which fits him, pattern it with different size shot, and then practice on a range prior to the opening of the hunting season. It is well-known that certain shotguns pattern differently with different loads, and, naturally, the hunter should be aware of the range and killing capacity of his weapon. Game is frequently crippled and lost when hunters use inadequate weapons or ammunition. On occasion, a dependable weapon will be damaged without the owner being aware of the accident. The writer learned this lesson the hard way many years ago. After missing literally dozens of easy shots at deer and turkeys, he finally discovered, by patterning, that his 30-inch double-barrel was shooting two feet low and a foot to the right at twenty paces! Moral: Know your weapon.

2. *Know your wildlife.*

Every huntable animal or bird has specific innate habits. Experience has shown most hunters that certain species will react in a recognizable way when they are hit or crippled. If the hunter will learn more about the hunted, crippling losses can be significantly reduced. Old-timers suggest keeping a close watch on the legs of a bird in flight; if they should drop after you shoot, the chances are that the bird has been hard hit. A number of years ago on Camp Pickett an 18-pound turkey gobbler was located and caught five hours after the hunter finally remembered that he saw one of the tom's legs drop.

After firing his gun the hunter should always follow the bird or animal as long as it is in sight. How often have you seen a dove, duck, quail, or grouse flying strongly suddenly fold up and fall dead hundreds of yards away?

Deer hunters claim positively that wounded deer invariably drop their tails, and that a pack of hounds will stop barking and leave a deer as soon as it is down. Naturally the best sign of all is to locate blood, feathers, hair or hide. Should you find any of these, search carefully; you have a cripple and it can probably be located.

While on the subject of knowing your wildlife, I painfully recall a hunting accident which involved a friend of mine in Piedmont Virginia. He was sitting on a stump one day when another hunter shot him in the back, fortunately with low power number eights. When questioned, the hunter's excuse was that he thought my friend was a *squirrel;* his victim was a six-footer who weighed over 250 pounds!

We have in our files a picture from an eastern newspaper showing two hunters with a turkey buzzard stretched out between them. The caption explained that this six-pound "turkey hen" was collected in the Blue Ridge Mountains, just in time for Thanksgiving—? Know your wildlife!

Game is often hard to find where it falls, even in fairly light vegetation. Mark it down carefully, and undertake a methodical search. Some sportsmen make it a point to count lost game as part of their limit, and those who do usually conduct a more thorough search when they score a hit.

Commission photo by Kesteloo

3. *Search systematically and carefully.*

Too frequently wildlife is lost completely because the hunter is either too impatient to search for the cripple or he hasn't bothered to mark the precise spot where the bird or animal dropped. Through the years the writer has formed a habit which has proven to be an almost fool-proof method of retrieving game. Why not try it next time you go hunting? As soon as the game is down, mark the approximate spot carefully by lining it up in relation to a tree, bush, fence, utility pole or some other convenient object. Go immediately directly to the spot, without ever taking your eyes from it. If you do not see your trophy, mark the spot with your hunting hat, coat or a handkerchief. Then systematically circle the object in ever-widening circles until you locate your game. If you don't find your bird or animal, then start over and repeat the operation.

A Southside hunter practiced this technique successfully

several years ago. He had gotten a wing shot at a turkey, and the bird had flown a considerable distance before falling. The hunter went to the spot where he thought the turkey had hit the ground. After hanging up his hunting coat he started circling. Sure enough, he finally located his wild turkey prize; but to this day he has never been able to find his hunting coat!

In going directly and rapidly to the fallen game, be careful if it happens to be a deer or a bear. Wounded big game can turn the tables on a hunter rather suddenly.

The writer learned still another lesson last year during the spring gobbler season. After having seen numerous turkeys escape after having been knocked down by a hunter, the writer invariably will rush from a turkey blind and get a hand on the bird before it can run or fly away. On this occasion the gobbler was playing possum and proceeded to spur the hunter painfully in his hand. Served him right!

4. *Learn to judge distances.*

It is downright discouraging to observe the shots that some hunters will take in an attempt to bag a limit of game. Nowhere is this practice more apparent than in a dove field or in a duck or goose marsh. A game bird can literally be on oxygen and climbing all the time when many hunters will continue shooting as long as it is in sight. Only on rare occasions will a lucky shot be successful. By shooting at targets obviously out of range, hunters cut their own throats, and, incidentally, those of their hunting companions, by chasing the game out of the territory and often crippling unnecessarily.

Since it is difficult for some individuals to judge distances, it is often helpful to do some pacing in the woods. First select some objects (trees, bushes or rocks) near your deer stand or turkey blind. Then pace off the distances, and figure out *in advance* how close your quarry will have to approach from any direction to be within range for successful shooting. A sporting shooting habit to acquire is *never* to fire unless you have a *good* chance for a *clean* kill.

5. *Limit your shots.*

Being a notoriously poor shot, the writer is always envious when observing a hunting buddy knocking down a double or, on rare occasions, a triple. We have observed, however, that in this type of shooting one or several birds are often lost. A more logical technique, especially while hunting in thick cover, is to drop only one bird at a time and then retrieve it immediately. This will result in better shooting averages, and less frustrations.

6. *Use a retriever.*

The use of a good retrieving dog naturally will assist in eliminating cripples or lost game. There are many excellent breeds of retrievers. Undoubtedly there are few outdoor experiences more thrilling than observing a well-trained dog locate and retrieve a duck, quail or grouse. Many years ago we owned an English springer spaniel that dearly loved to retrieve. One day while duck hunting in the Roanoke River swamp in Charlotte County I got the daily bag limit of ducks without firing my gun. The spaniel located and retrieved waterfowl that other hunters had crippled the previous day.

Besides the thrill of seeing a good dog work, a retriever gives the hunter the enormous satisfaction of keeping his crippling losses to a minimum while permitting him to devote less of his precious shooting time to beating the brush.

Commission photo by Kesteloo

7. *Select a proper stand.*

This technique applies primarily to one of our most popular sports—dove hunting. Ordinarily, in the early fall of the year when cover is thick numerous downed doves cannot be located. In addition to the suggestions already covered, we have found that the selection of a stand is most important. Try to anticipate the direction in which the birds will be flying and pick out a stand a good distance from heavy cover. This will permit the hunter to spend less time in frantically hunting his cripples or lost birds. Some of our hunting acquaintances refuse to shoot if the bird might fall across a river, into a swamp or other thick cover. Other hunters, unfortunately, are not this thoughtful.

On our managed dove fields, game managers mow the adjacent cover to help eliminate the lost bird problem.

With the approach of another hunting season in the Old Dominion, why not concentrate this year on trying to eliminate crippling losses? If you will conscientiously follow the seven helpful hints listed above, we assure you that you will have the most gratifying season ever. Happy hunting!

Safety: A Hunter's Responsibility

(Continued from page 9)

Unfortunately, knowing and applying all the principles for safe hunting is not complete insurance that an individual hunter will not become another victim. There are other so-called sportsmen who are less qualified to be classified as safe hunters. This type, while few in number, comprise the dangerous variable in an otherwise relatively safe sport. They are a potential menace to themselves and their contemporaries; it is profitable accident-prevention procedure to avoid their company.

The causes for most hunting accidents are few. They are not complex in nature and readily lend themselves to corrective action:

(1) *Shooting before positive identification of the target.*

These are not unusual incidents; they have been happening for years. They are, in general, caused by hunters who fire *blindly* at *sounds* they choose to interpret as a disturbance that could only be caused by game. If not shooting *blindly*, the hunter erroneously *conditions* his mind to expect only game to break from cover; whatever does emerge receives the shot, be it game or another human. If it is game (and not another human being, by chance alone) and this "hunter" bags it, he is often unmindful of the terrible *chance* he took because he is so busy congratulating himself on his "success." What he is ignorant of is that he is a true menace, and that the time required to *see* and be *sure* the target is not a man, woman or child is only about a tenth of a second.

(2) *Loaded weapons in a vehicle—placing in, removing from* or *riding with.*

Each of the actions has produced its share of accidents. It is a practice followed by many more hunters than those injured from these causes each year. Many will continue the bad practice in spite of warning to the contrary. The habit is insidious, waiting only to ensnare; one day it will. The best and safest practice is to unload the weapon before placing it in a vehicle. For those who are determined to follow their potentially dangerous habit, all that can be said is—don't fall behind with your prayers.

(3) *Using defective, worn or obsolete weapons.*

(a) The trigger and sear mechanisms that release the hammer or firing pins become worn and damaged. Some are so sensitive that closing the breech or bolt sometimes fires the weapon. The "safing" devices often are unreliable, sometimes moving to the "firing" position by inertia alone—or work only part-time. Chambers may be enlarged and breech-bolts may have developed excessive head space, causing split, ruptured or bulged cases and shells with gas and metal particles projected rearward. Weapons showing these tendencies should not be used. Remember, shoulder-fired weapons develop breech pressure from 12,000 to 50,000 pounds per square inch and more.

Obstructions in the barrel are dangerous. Check for a clear bore whenever the muzzle of your firearm comes in contact with the ground.

Commission photo by Kesteloo

Do not shoot toward buildings. Property damage, injured livestock, or human casualties are likely consequences of ignoring this rule of shooting safety.

(b) Damascus or twist barreled shotguns are *dangerous* to use with modern fast burning double base propellants. The gun, from all appearance, may be in excellent condition, but it can be a real hazard. Don't use it; the barrel may rupture when fired.

(c) Single and double-barrel shotguns of the break-open type tend to *shoot loose*. Repeated opening and closing over the many years they have been in service, *wears* the hinge pin and locks to the point where barrel and action have considerable relative movement, particularly noticeable in the older and cheaper weapons. Sometimes a *gap* exists between the receiver and breech-end of barrel. Guns in such condition are defective and dangerous weapons—don't use them.

(4) *Shooting at game when other hunters are, or could appear, in line of fire.*

(a) At first glance it may appear that such exposure of other hunters is either hypothetical or has infinitesimally small probability for occurrence. On the contrary, both conditions are valid and have their foundation on solid facts. It happens many more times than is reflected by the statistics—a paradox only because *chance* is capricious.

(b) It is a temptation to shoot at an easy low flying incoming or outgoing bird. Be sure, first, that no other hunters are within the 45 degree area each side of your line of fire. Never shoot at game moving parallel, and in close proximity, to your advancing line of hunters. Make it a habit to forego shots at game about to disappear over the top of a knoll, or dodge around the far corner of a building;

someone could appear directly in line as the shot is fired.

(5) *Failure to maintain constant control of muzzle of the weapon.*

(a) It's quite easy to *forget* to control the muzzle which is very much the business end of every weapon. For those who have doubts that this is so, the next time you have occasion to meet and engage in casual conversation with a group of "hunters" in the field, here is what you could do in the way of personal experimental research on the problem:

(a-1) Keep the muzzle of your own weapon pointing in a safe direction and unload it or open the breech.

(a-2) Continue your ordinary conversation but keep count of the number in the group following your good example. Of particular interest will be the number of times you are required to step out of line to avoid looking into the muzzle of someone else's gun; each time you are "covered" is a prelude to becoming listed in the accident victim column.

(b) If one should stumble and fall, hold on to the weapon and keep its muzzle in a safe direction. To throw the weapon aside in the process of falling invites injury if it should (and could) fire upon impact. The fall itself may cause serious effects, but do not compound the problem with a bullet or a charge of shot.

(c) *Weapon fired accidentally* when trigger caught on brush, when hunters crossed fence, when falling from insecure positions:

(c-1) Each of these three circumstances results in casualties because of uncontrolled muzzle direction. Accidents following the pattern of the last two conditions mentioned above would not have occurred had the weapon been unloaded first.

(c-2) To prevent brush and twigs engaging the trigger, carry the weapon—with the muzzle in a safe direction—with *safe "on."* Place the hand *over* the *trigger guard* to exclude the chance entry of obstructions; it is good practice to exclude the trigger finger also, until ready to fire. Never, under any circumstance, drag the weapon, loaded or empty, by the barrel with the stock on the ground.

(c-3) Fences have, and will continue, to be crossed empty handed, after putting the loaded weapon *under* the fence first. This practice, while appearing safe needs great care to make it so. It can readily be understood that pushing the muzzle under the fence, followed by the stock, may cause dirt and debris to *enter* and *plug* the barrel. It follows also that when picking up the gun, the barrel may be lifted first. A modified practice, such as the following, would be more prudent:

First—Be sure to keep the muzzle pointed, always, in a safe direction. with the safe "on."

Second—Place the gun parallel to the ground. Slide the gun, *stock first* under the fence. Never prop the loaded gun against a fence post or other rest.

Third—Move away from the gun a sufficient distance. so that should you fall, when climbing, you will not land on the loaded weapon.

Fourth—Pick up the gun, stock first, and inspect to insure freedom of obstructions in barrel and action.

Fifth—Give careful consideration to the advantages in time and safety that an unloaded weapon provides when next you have a fence to climb, or unstable and insecure footing to negotiate.

Ten cardinal rules for safe hunting are summarized as follows:

1—Consider every gun to be loaded; treat it accordingly.
2—Control the muzzle to point always in a safe direction.
3—Unload guns when not in use or when left unattended.
4—Unload weapons before entering home, camp, vehicle, or boat.
5—Identify target completely before pulling trigger.
6—Do not shoot at water or hard flat surfaces. Bullets and shot will ricochet at unknown angles and trajectory.
7—Be sure barrel and action are clear of obstructions before shooting. Check ammunition for proper caliber or gauge.
8—Check the chamber. action and magazine of the weapon for presence of ammunition before cleaning.
9—Do not climb a fence, a tree. or move across areas affording unstable footing with a loaded weapon.
10—Be completely familiar with your weapon and with the capability and *extreme* range of its ammunition; it is dangerous as far as the shot or bullet will carry.

The tense and anxious hunter who unconsciously conditions his mind to expect only game to break from cover may shoot in the split second before his eye and brain identify the target.

Commission photo by Kesteloo

Edited by HARRY GILLAM

From Quill Pens to Computers

Lillian B. Layne, Chief of the Commission of Game and Inland Fisheries' Fiscal Division, retired October 23 with 45 years of service to the organization. During this "half-century" career she has witnessed from the inside nearly the entire history of the Game Commission and the many changes in organization, policy and practice which have taken place.

She began work as secretary to Lewis W. Tyus, who served as editor of the *Game and Fish Conservationist* and other Commission publications, took care of the Commission's fiscal matters, and also served as a District Game Warden Supervisor. He later was designated Chief of the Commission's Fiscal Division, and Miss Layne continued as his secretary and later his assistant. She was appointed Chief of the Fiscal Division in March of 1948, in which capacity she served until her retirement.

During her tenure with the Commission's Fiscal Division she has seen the organization's bookkeeping operation progress literally from quill pens to computers. Since the days of pen and ink entries when she began work, the Commission has incorporated various mechanical aids including accounting machines and just recently IBM equipment. She has seen Game Commission revenues grow from $111,262 in 1921 to over 3 million during the past fiscal year.

As in all businesses, she has seen the bookkeeping complicated by such things as social security deductions, state and federal income tax withholding, medical insurance, state group life insurance, bond purchase plans, retirement deductions and a variety of other employee benefits. Both the Pittman-Robertson and Dingell-Johnson federal aid plans were enacted during her tenure, involving many changes in the Commission's fiscal operation to keep separate records on the various projects and to allocate the 25% matching moneys from Commission funds. Just recently, she has become involved with yet another federal program, the Land and Water Conservation fund, which requires separate accounting for its projects and provides for 50% matching funds.

She has seen the Game Commission's programs change from efforts directed mainly toward mass stocking of fish and game to a balanced program of habitat improvement and limited selective stocking. She has also seen the Commission assume the responsibility of providing public hunting and fishing areas and access to Virginia waters. Through all of this, the Commission has remained financially sound, operating on hunting and fishing license revenues and such federal aid funds as it was entitled to, and much of the credit for this stability belongs to Miss Layne.

When asked what highlights she remembered most vividly from her long and varied career, Miss Layne said, "I have been too busy with current problems to dwell on problems and successes of the past," and this philosophy has undoubtedly been her secret for success.

New Goshen-Little North Mountain Map

The Commission has just finished a large fold-out map of its Goshen-Little North Mountain Wildlife Management Areas. The two color folder showing boundaries, access roads and campsites is available free from the Commission's Richmond office and from license agents and checking stations in the central mountain area.

Smith Mountain Striper

Photo by Rutherfoord

Rufus Eubank holds a 9¼ pound striper, one of several to come from Smith Mountain Lake this summer. Fisheries workers think the fish must have grown from fry stocked in the lake during the past several seasons since no adults this small have been released there. This striped bass hit a Cisco Kid lure near the dam.

Strange Pair

This pair of way-out bucks who coolly survey the stream of humanity which passes by are the property of I. E. Harvey of Albemarle County and are on display in the Esso station he operates. Game Warden Lewis Brandt supplied the photo.

Edited by ANN PILCHER

Spotsylvania Bass

This 7 pound, 22 inch largemouth bass was caught by Billy Lockner, of Beaverdam, while fishing in a Spotsylvania pond. The proud 15 year old caught his prize fish on a night crawler.

Gun Safety & Outdoor Life Class

These youngsters are Loudoun-Shenandoah 4-H Club members who attended Powell's Fort Camp August 8-11. Instructors for the gun safety and outdoor life classes were State Game Wardens Fred W. Hottle of Edinburg (back row, left) and Robert W. Inskeep of Luray (back, right).

Teachers Study Conservation; Visit Three Gloucester Farms

Ninety-six teachers attended the conservation short course held this past summer, as in previous years, on the campuses of Madison, V.P.I., Virginia State College, and the College of William and Mary. Since it was first offered 12 years ago at VPI more than 1,000 public school teachers have taken the classes, assisted through scholarships provided mainly by Izaak Walton League chapters, garden clubs, industries, and soil and water conservation districts.

Mr. E. W. Mundie, course director, has said: "The strength of this course is that the teachers get into the field and actually see the work being done in conservation." One of their several field trips took William and Mary students this year to three Gloucester County farms in one afternoon. Farms visited were those of Mr. S. A. Janney and Mr. A. G. Birdsall at Gloucester and Messrs. James and Joseph Pointer at Bellamy. At the Janney farm students viewed contour farming, buffer strip and terrace farming operations. A tile drainage project was described at the Pointer farm, and at the Birdsall place the teachers saw a spring and seep development, ditch bank seeding for erosion control and a permanent fescue pasture for soil conservation.

Specialists in the areas of geology and conservation of soil, water, forests, wildlife and marine resources handled the classroom and field instruction.

Students also took wildlife and forestry tours, and visited government agencies such as the Virginia Institute of Marine Science at Gloucester Point, where they viewed facilities and were instructed in their operation.

Mr. David Lipps, soil conservationist, describes conservation practices depicted on a model farm to school teachers taking the conservation short course at the College of William and Mary. On an afternoon field trip the class visited three Gloucester County farms.

Courtesy Newport News *Daily Press*

Citation on His First Try

William (Jimbo) Jenkins, age 11, landed this 12½ pound striped bass (good for fresh- and saltwater fish citations) in August from the lower James River. The Newport News youngster used soft shell crab as bait on 30-pound test monofilament line.

Courtesy Newport News *Daily Press*

Edited by JIM KERRICK

Outboard Economy

"The bigger the outboard motor is, the less economical it is to run."

Rare is the boater who hasn't heard this statement from time to time, and rarer still is the boater who knows how misleading it is.

Usually the idea is expressed like this: "When you've got all those horses in the barn, you've got to feed them."

In many circumstances the more powerful outboard will be more economical to run. To prove it a fuel economy comparison test between a 65 hp and 95 hp models was conducted.

If the old saw about feeding the horses were true, the 65 hp model would perform more economically than the six-cylinder model.

Tests were made under identical conditions using a 16-foot runabout. Fuel economy curves showed that the less powerful motor enjoyed a slight advantage at lower speeds—up to about 28 miles per hour. From that point on the 95 hp engine showed an ever-increasing fuel economy advantage over its little brother.

At 30 miles per hour the 65-horsepower model got 5.18 miles per gallon, while the 95 horse was getting 5.6 mpg. At 33 miles per hour the smaller motor logged 4.4 mpg—the 95-hp model almost 5.4 mpg. At 33.7 miles per hour, which represented full throttle operation for the 65-horse, the 95 obtained over 5.2 mpg but the smaller motor was getting only a fraction over 4 mpg. The bigger engine not only had a big edge in fuel economy, but it boasted a speed advantage of approximately eight miles per hour.

There is nothing too surprising about these test results. The reason for the better performance of the bigger engine at higher speeds is a simple one: the smaller has to work harder to do the same job as the 95, so it uses more gas.

As a general rule, a bigger engine operated at about seven-eighths throttle will run more economically than a smaller motor going full bore. This is an important point to consider when you're trying to decide which of two motors to choose for a particular boat. The man who underpowers his boat because he believes the smaller motor will give him better fuel economy is going to regret his choice.

Serviceability of Portable Fire Extinguishers

Approved dry chemical fire extinguishers without visual indicators or gauges must have a date on the inspection record which shows that a weight check ashore was made during the past six months. Without this check the fire extinguishers cannot be accepted as serviceable.

Boatmen Pay Their Way, Report Shows

If you don't think boatmen are doing their share to promote better outdoor recreation, consider these figures: $31,346,980 in Federal marine fuel taxes went into the Land and Water Conservation Fund during fiscal 1967, out of a total of some $94 million. Since the Fund's inception two years ago, marine fuel tax has produced $63,355,591 of the total of $233 million. Recreation permits and user fees for Federal recreation facilities have produced only $11 million total thus far. The remainder of the Fund came from sale of surplus government property.

Boats Worth $5,000 Now Under Dyer Act

A stolen boat worth $5,000 or more that is transported outside state jurisdiction onto the high seas now comes under the provisions of the Federal National Stolen Property Act, as a result of a recent court decision. The Federal Court for the Eastern District of Louisiana decided that the so-called Dyer Act applies to stolen boats in the case of *U. S. vs. Lloyd*. The U. S. Justice Department inteprets the Lloyd case as giving it and the Coast Guard authority to recover stolen boats in similar situations.

Boatmen: Keep a Weather Eye

With the many sources of weather information now available to boatmen, very few boating accidents should be caused by hazardous weather conditions.

Weather sense begins before leaving the dock. A quick call to a Weather Bureau marine forecast number should be routine for every boating enthusiast. And when on the water, boatmen should keep a weather eye peeled for a change that could produce suddenly unhealthy weather or sea conditions, catching smaller craft in unsheltered waters. Small boat operators should always heed storm warning signals.

The Weather Bureau publishes Coastal Warning Facilities Charts for local areas. These charts contain pertinent information on weather bureau offices, AM, FM and TV stations broadcasting marine weather forecasts, and the location of storm warning display stations. The charts can be purchased for 10 cents apiece from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20401. State the local area desired.

Coast Guard stations broadcasting marine forecasts precede their routine report on 2670 kc/s. with an announcement on 2182 kc/s. Urgent warnings are transmitted immediately on 2182 kc/s.

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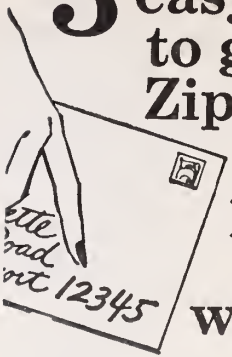
3 easy ways to get the Zip Codes of people you write to:



1 When you receive a letter, note the Zip in the return address and add it to your address book.

2 Call your local Post Office or see their National Zip Directory.

3 Local Zips can be found on the Zip Map in the business pages of your phone book.

Bird of the Month:

Ruffed Grouse

By DR. J. J. MURRAY
Lexington

AS I write this Bird-of-the-Month page I have an invitation to visit a young minister friend and his wife at Windy Cove in Bath County and eat ruffed grouse. A mighty hunter, he always has some of these birds in the deep freeze. And good eating they are, better, some of us think, than wild turkey or even bobwhite. Some of us feel with Daniel Boone that a turkey is a little too much for a meal, while one bobwhite is only a starter. The only trouble about eating a bird as fine as a ruffed grouse is that it calls for a bit of quieting for a tender conscience.

The ruffed grouse is a handsome bird. The female is lovely enough, but a strutting male is a sight to behold. Its general color is a rich brown, with a tendency to gray. He often raises the feathers on the top of his head when excited. The bird takes its name from the ruff of feathers on the sides of the male's neck, dark in color and with an iridescent sheen. In courtship this ruff is spread into a mantle about the neck. At the same time the tail is expanded into a half circle of lovely browns, barred with black. There is a dark band near the end of the tail with a light terminal tip.

I have the skin of a bird in which all the colors are deepened with red. The ruff is henna colored. Wherever there is dark in the normal plumage, this individual has henna or reddish. This reddish form seems to be more common in the southern Appalachians than anywhere else in the bird's range, possibly occurring in one out of every fifty individuals.

The nest is usually sheltered under a fallen log. From it, if too closely approached, the sitting bird may explode in your face. Actions of different females vary very much, however. From one nest which I approached closely the female slipped quietly off, and then flew away with a whir. She lit some 40 feet away and disappeared without using the broken-wing ruse. On the other hand, I have had the hen try to lead me away from the young, squeaking but not doing the broken-wing stunt. When a female with small young following her is disturbed, she will usually do a lot of fluttering, as if with a broken wing, sometimes whining like a dog, until the young have had a chance to hide.

In Rockbridge we often see them near our cabin, which is in a fairly open area, bounded by the Maury River on one side and a well-travelled country road on the other. When flushed they will often fly almost straight up to the top of the cliff across the river. These birds sometimes wander into town. I once flushed one from under a crab-apple tree in our yard in the middle of Lexington.

While the size of egg clutches varies greatly, from five to as many as 17 eggs, 11 or 12 seems to be the most usual number. Second attempts, after a set has been destroyed, are usually smaller in number. Very large clutches are probably due to the laying of two hens in the nest.

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